WEST VERMONT SITE SPEEDWAY, MARION COUNTY, INDIANA DATA VALIDATION REPORT

Date: February 27, 2014

Laboratory: Pace Analytical Services, Inc. (Pace), Indianapolis, Indiana

Laboratory Project #: 5093632

Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON®) Superfund

Technical Assessment and Response Team (START)

Weston Analytical TDD/Work Order #: S05-0001-1306-013/20405.016.001.2190.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 20 groundwater samples and one trip blank collected for the West Vermont Site that were analyzed for the following parameters and methods.

• Volatile Organic Compounds (VOC) by SW-846 Method 8260

• Dissolved Gases (Methane, Ethane, and Ethene) by RSK-175

A level II data package was requested from Pace. The data validation was conducted in general accordance with the U.S. Environmental Protection Agency "Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review" dated June 2008. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

VOCs BY EPA SW-846 METHOD 8260

1. <u>Samples</u>

The following table summarizes the samples for which this data validation is being conducted.

			Date	Date
Samples	Lab ID	Matrix	Collected	Analyzed
WVS-MWWES-TRIPBLANK-021714	5093632001	Water	2/17/2014	2/21/2014
WVS-MWWES-03A-021714-GW	5093632002	Water	2/17/2014	2/21/2014
WVS-MWWES-03B-021714-GW	5093632003	Water	2/17/2014	2/21/2014
WVS-MWWES-05A-021814-GW	5093632004	Water	2/18/2014	2/21/2014
WVS-MWWES-05B-021814-GW	5093632005	Water	2/18/2014	2/21/2014
WVS-MWWES-05C-021814-GW	5093632006	Water	2/18/2014	2/21/2014
WVS-MWWES-01C-021814-GW	5093632007	Water	2/18/2014	2/21/2014
WVS-MWWES-01B-021814-GW	5093632008	Water	2/18/2014	2/21/2014
WVS-MWWES-01A-021814-GW	5093632009	Water	2/18/2014	2/21/2014
WVS-MWWES-02A-021914-GW	5093632010	Water	2/19/2014	2/21/2014
WVS-MWWES-02B-021914-GW	5093632011	Water	2/19/2014	2/21/2014
WVS-MWWES-02C-021914-GW	5093632012	Water	2/19/2014	2/21/2014
WVS-MWWES-06D-021914-GW	5093632013	Water	2/19/2014	2/21/2014

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			Date	Date
Samples	Lab ID	Matrix	Collected	Analyzed
WVS-MWWES-06S-021914-GW	5093632014	Water	2/19/2014	2/21/2014
WVS-MWWES-09D-021914-GW	5093632015	Water	2/19/2014	2/21/2014
WVS-MWWES-09S-021914-GW	5093632016	Water	2/19/2014	2/22/2014
WVS-MWWES-08D-022014-GW	5093632017	Water	2/20/2014	2/22/2014
WVS-MWWES-08S-022014-GW	5093632018	Water	2/20/2014	2/22/2014
WVS-MWWES-07D-022014-GW	5093632019	Water	2/20/2014	2/22/2014
WVS-MWWES-DUP1-021914-GW	5093632020	Water	2/19/2014	2/22/2014
WVS-MWWES-DUP2-021914-GW	5093632021	Water	2/19/2014	2/22/2014

2. <u>Holding Times</u>

The samples were analyzed within the required holding time limit of 14 days from sample collection.

3. Blanks

The method blanks and trip blank were analyzed with the VOC analyses and were free of target compound contamination above the reporting limit.

4. Surrogate Recovery Results

The surrogate recoveries were within the laboratory established quality control (QC) limits.

5. <u>Laboratory Control Sample (LCS) Results</u>

The LCS recoveries were within laboratory QC limits except for as follows. A couple of compounds were detected slightly above the QC limits; however, these compounds were not detected in the samples and no qualifications were required.

6. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

A site-specific MS and MSD were analyzed. The percent recoveries and relative percent differences (RPD) were within QC limits except for as follows. Two VOCs were detected slightly outside the QC limits. However, these compounds were not detected in the samples and no qualifications were required.

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7. Field Duplicate Results

Sample WVS-MWWES-DUP1-021914-GW is a field duplicate of sample WVS-MWWES-02B-021914-GW and sample WVS-MWWES-DUP2-021914-GW is a field duplicate of sample WVS-MWWES-09D-021914-GW. The RPDs ranged from 5 to 8 for detected VOCs which are acceptable.

8. Overall Assessment

The VOC data are acceptable for use based on the information received.

METHANE, ETHANE, AND ETHENE BY RSK-175

1. <u>Samples</u>

The following table summarizes the samples for which this data validation is being conducted.

			Date	Date
Samples	Lab ID	Matrix	Collected	Analyzed
WVS-MWWES-03A-021714-GW	5093632002	Water	2/17/2014	2/24/2014
WVS-MWWES-03B-021714-GW	5093632003	Water	2/17/2014	2/24/2014
WVS-MWWES-05A-021814-GW	5093632004	Water	2/18/2014	2/24/2014
WVS-MWWES-05B-021814-GW	5093632005	Water	2/18/2014	2/24/2014
WVS-MWWES-05C-021814-GW	5093632006	Water	2/18/2014	2/24/2014
WVS-MWWES-01C-021814-GW	5093632007	Water	2/18/2014	2/24/2014
WVS-MWWES-01B-021814-GW	5093632008	Water	2/18/2014	2/24/2014
WVS-MWWES-01A-021814-GW	5093632009	Water	2/18/2014	2/24/2014
WVS-MWWES-02A-021914-GW	5093632010	Water	2/19/2014	2/24/2014
WVS-MWWES-02B-021914-GW	5093632011	Water	2/19/2014	2/24/2014
WVS-MWWES-02C-021914-GW	5093632012	Water	2/19/2014	2/24/2014
WVS-MWWES-06D-021914-GW	5093632013	Water	2/19/2014	2/24/2014
WVS-MWWES-06S-021914-GW	5093632014	Water	2/19/2014	2/24/2014
WVS-MWWES-09D-021914-GW	5093632015	Water	2/19/2014	2/24/2014
WVS-MWWES-09S-021914-GW	5093632016	Water	2/19/2014	2/25/2014
WVS-MWWES-08D-022014-GW	5093632017	Water	2/20/2014	2/25/2014
WVS-MWWES-08S-022014-GW	5093632018	Water	2/20/2014	2/25/2014
WVS-MWWES-07D-022014-GW	5093632019	Water	2/20/2014	2/25/2014
WVS-MWWES-DUP1-021914-GW	5093632020	Water	2/19/2014	2/25/2014
WVS-MWWES-DUP2-021914-GW	5093632021	Water	2/19/2014	2/25/2014

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2. <u>Holding Times</u>

The samples were analyzed within the required holding time limit of 14 days from sample collection.

3. Blanks

Method blanks were analyzed with the dissolved gas analyses and were free of target compound contamination above the reporting limit except for as follows.

On analysis date 2/24/14, ethene was detected in the method blank at 15.7 micrograms per liter. Because ethene was not detected in samples analyzed on this date, no qualifications were required.

4. <u>LCS Results</u>

The LCS recoveries were within laboratory QC limits.

5. <u>Field Duplicate Results</u>

Sample WVS-MWWES-DUP1-021914-GW is a field duplicate of sample WVS-MWWES-02B-021914-GW and sample WVS-MWWES-DUP2-021914-GW is a field duplicate of sample WVS-MWWES-09D-021914-GW. The RPD for the one detected compound was 30 percent which is acceptable.

6. <u>Laboratory Duplicate CS Results</u>

The laboratory duplicate results were acceptable.

7. Overall Assessment

The dissolved gas data are acceptable for use based on the information received.

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ATTACHMENT

PACE ANALYTICAL SERVICES, INC. RESULTS SUMMARY